

FIG. 1

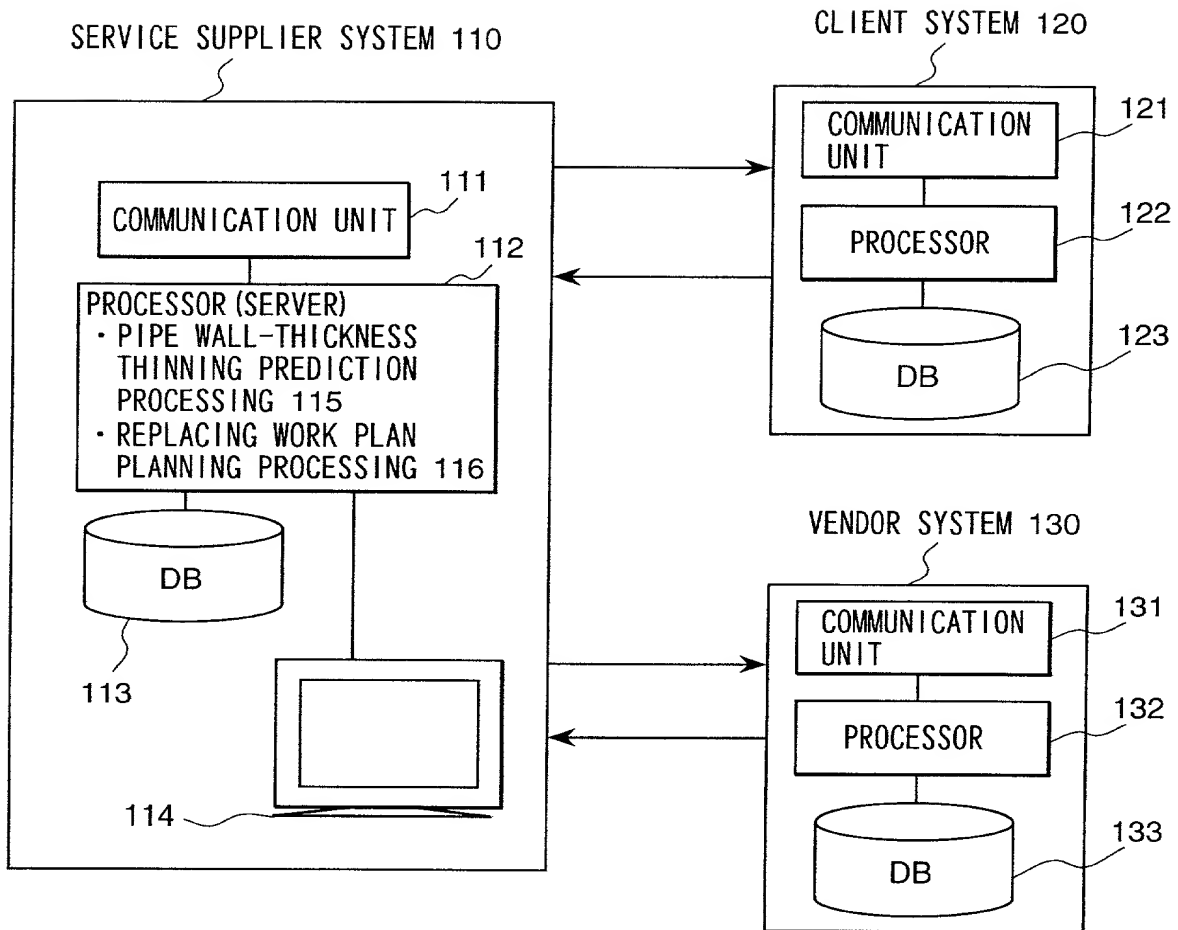


FIG. 2

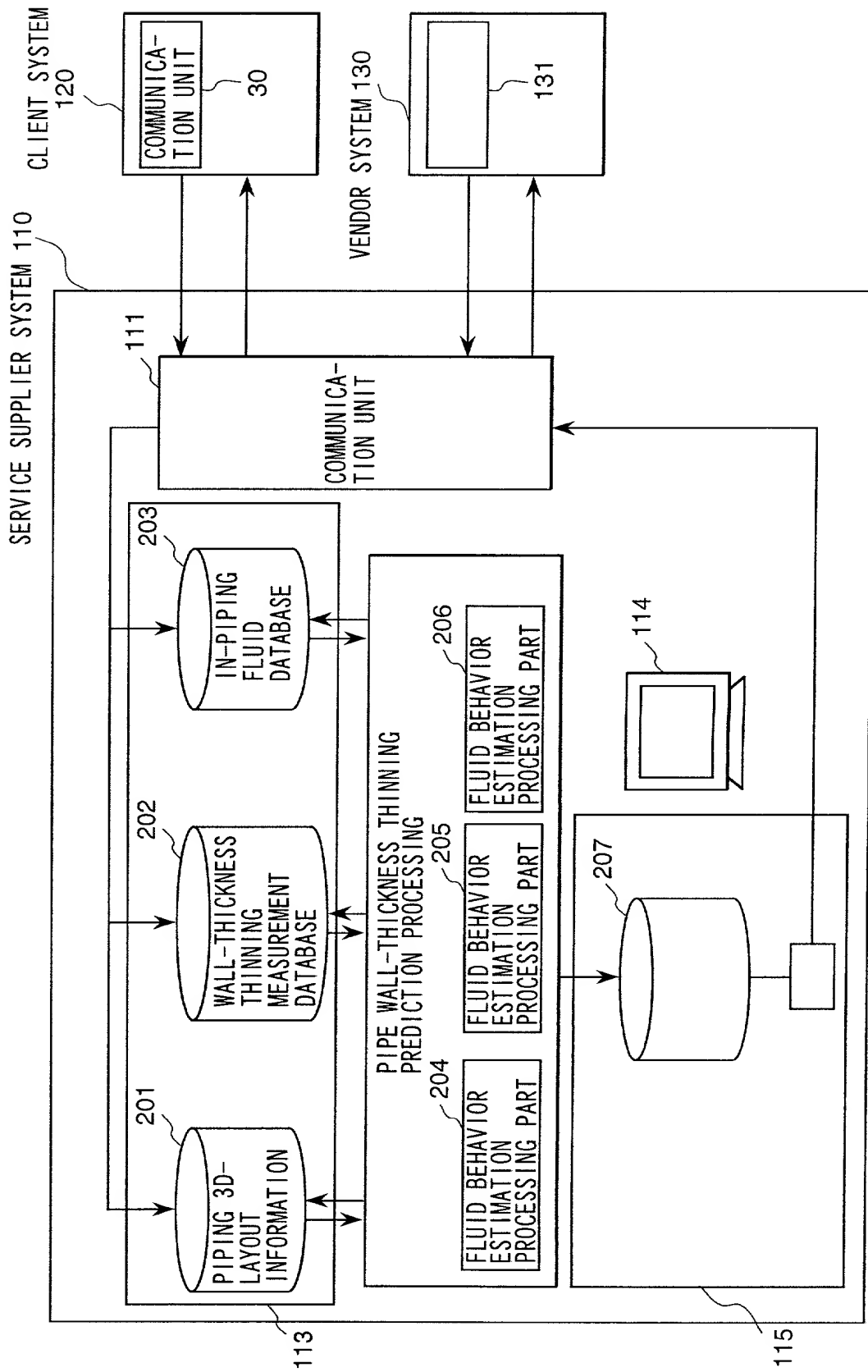


FIG. 3

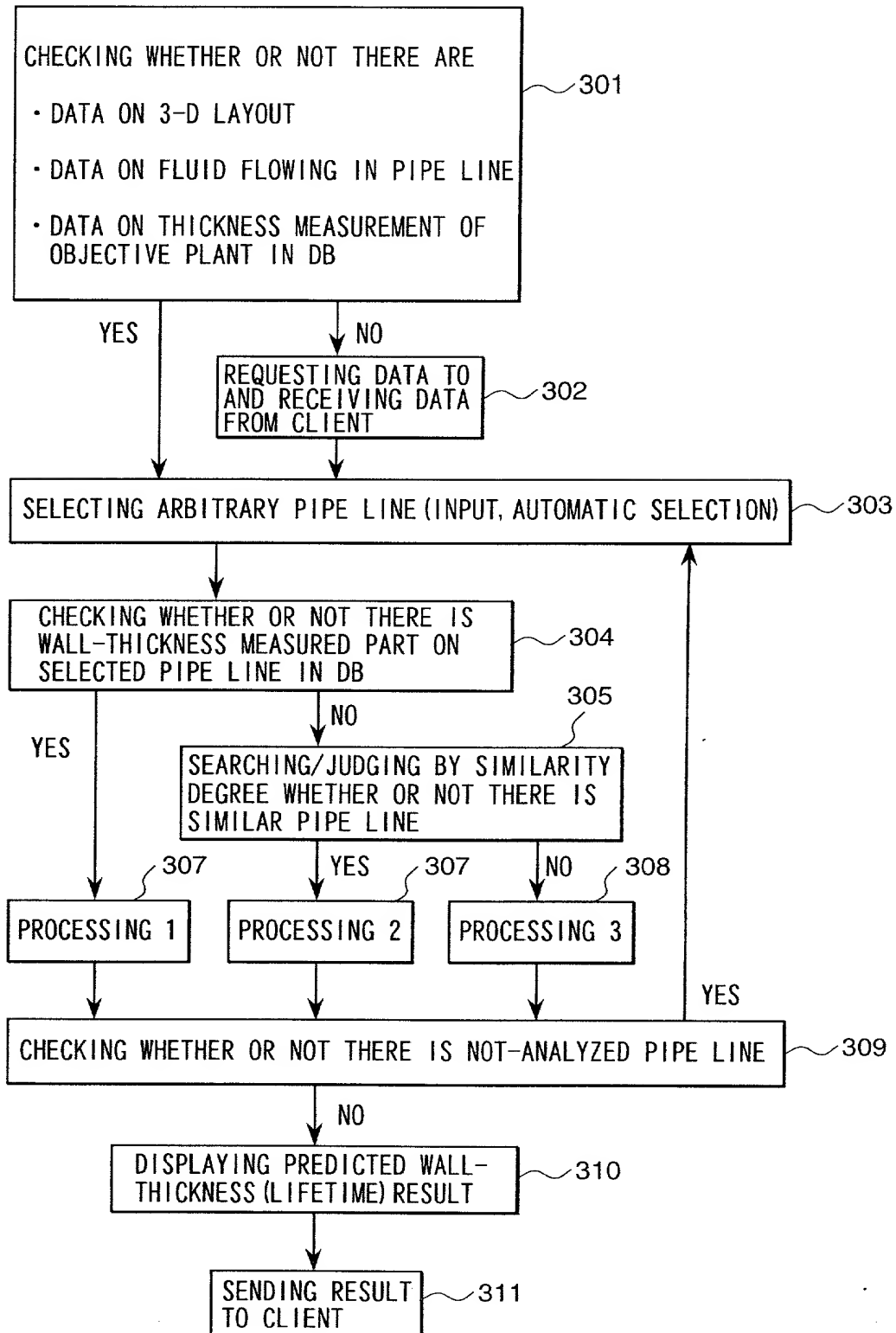


FIG. 4

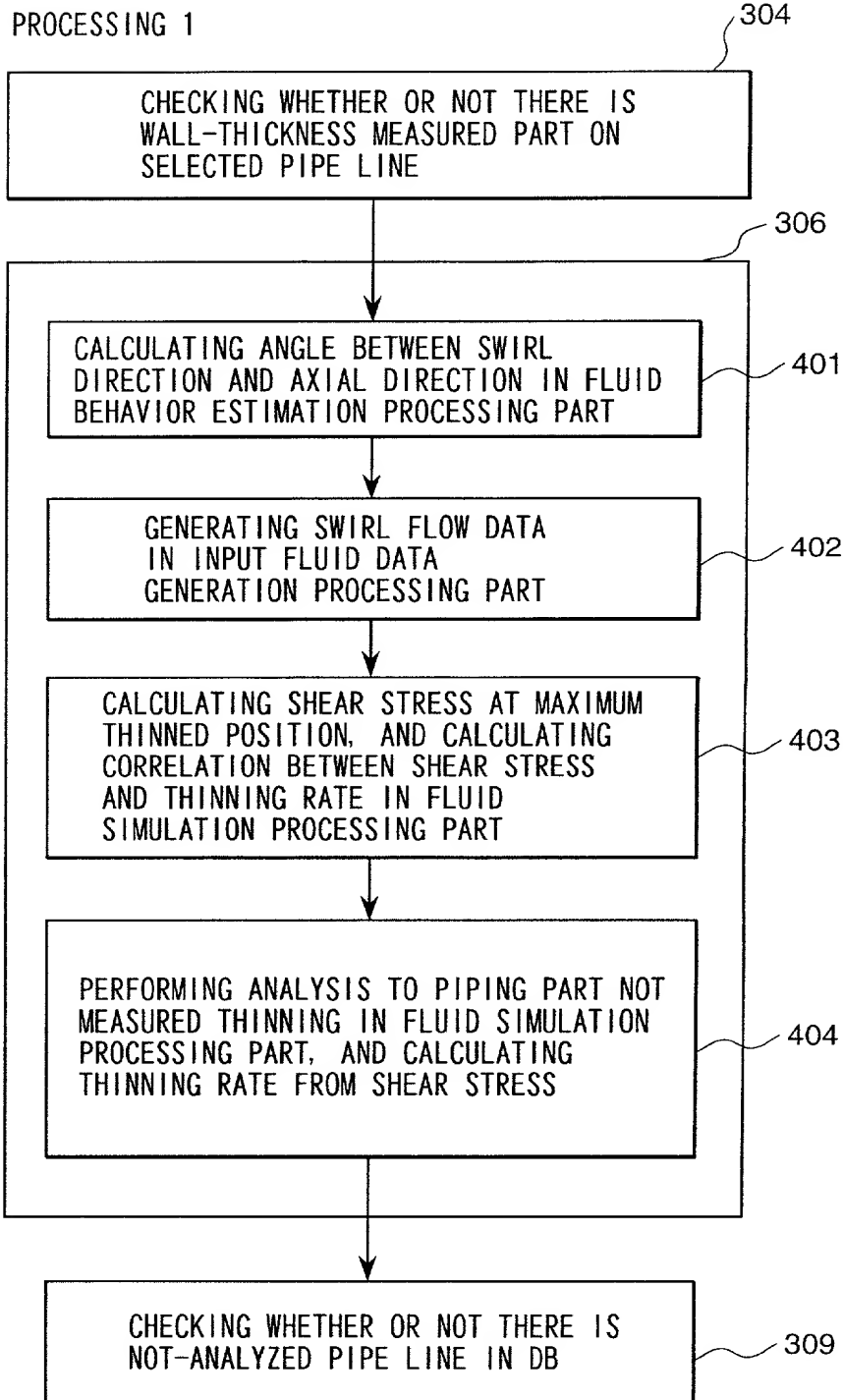


FIG. 5

PROCESSING 2

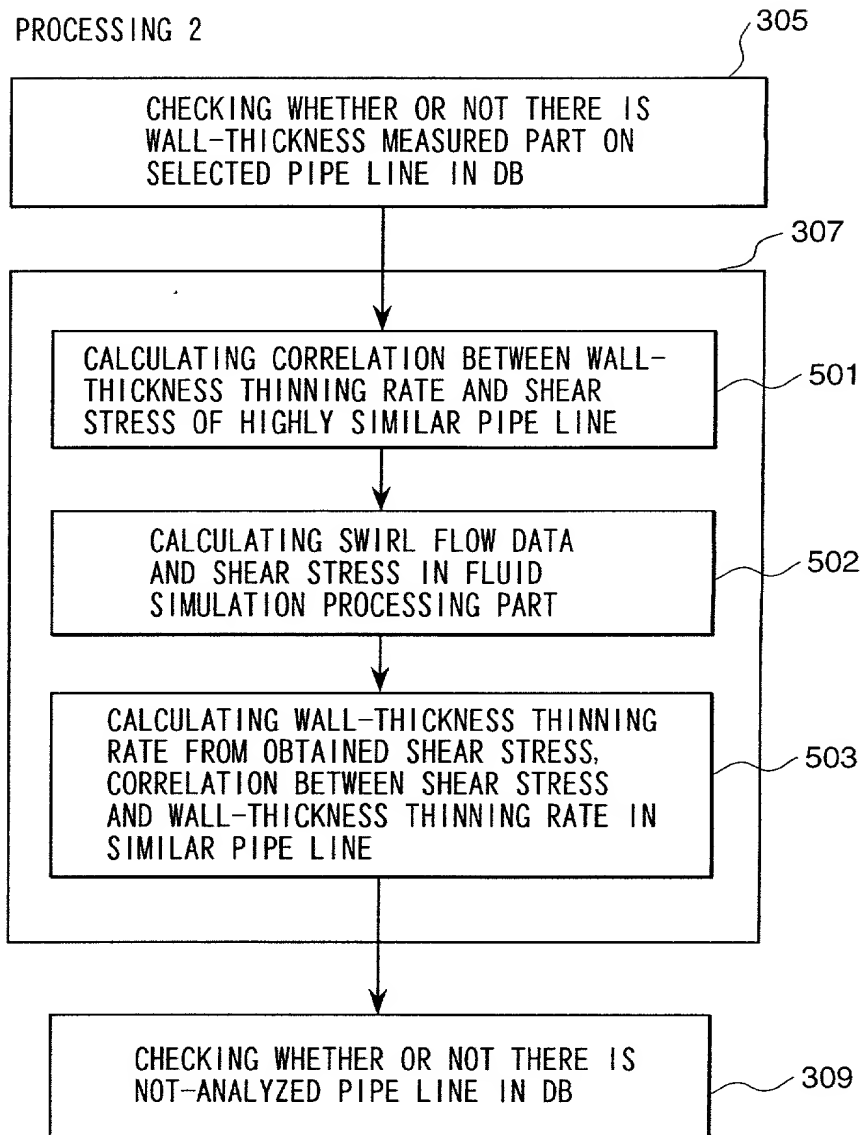


FIG. 6

PROCESSING 3

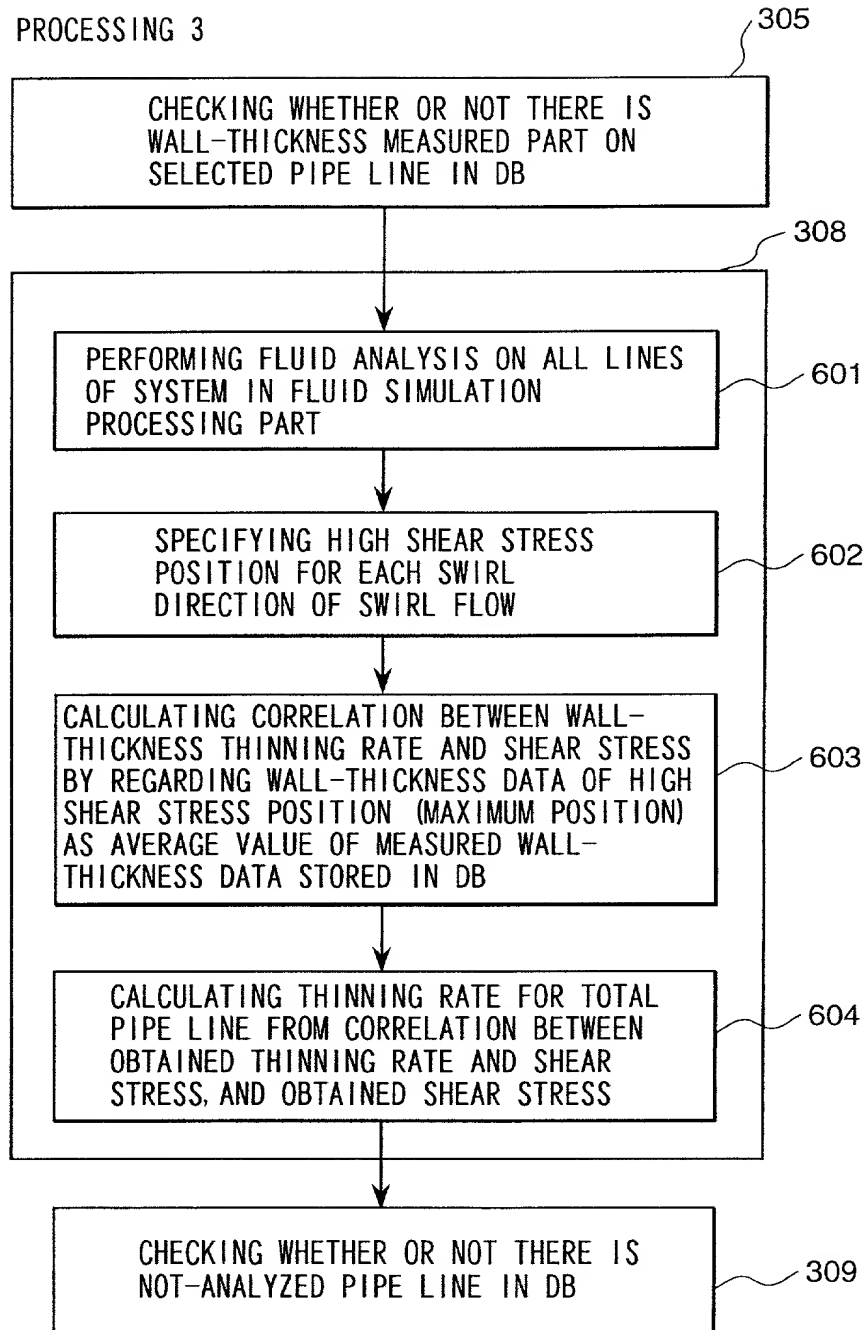


FIG. 7

PART ID

POSITIONAL INFORMATION

CONNECTION INFORMATION

PART ID	KIND OF PART	SHAPE	MATERIAL	...	SYSTEM No.	PIPE-LINE No.	MEASURED WALL-THICKNESS DATA
EQ-001	EQUIPEMENT	BLOCK(30 × 100 × 20)	Fe	:			
EQ-002	:	:	:	:			
:	:	:	:	:			
PIPE-001	PIPE	CYL INDR(10 × 60)	Fe	:			
PIPE-002	:	:	:	:			
:	:	:	:	:			
:	:	:	:	:			

KIND OF PART

POSITIONAL INFORMATION

EQUIPEMENT	CENTER COORDINATE (X, Y, Z)
PIPE	END POINT (X ₂ , Y ₂ , Z ₂) – STARTING POINT (X ₁ , Y ₁ , Z ₁)
:	:
:	:

KIND OF PART

CONNECTION INFORMATION

EQUIPEMENT	(CONNECTION PART ID), ...
PIPE	(CONNECTION PART ID ₁), (CONNECTION PART ID ₂), ...
:	:
:	:

[illegible]

MEASURED WALL-THICKNESS DATA ID	1 (0)	2 (0,5)	3 (1,0)	4 (1,5)	5 (2,0)	...	n (x,y)
1 (0)	3.8	3.9	4.0	4.3	3.8	...	
2 (1,0)	3.9	4.1	3.6	3.8	3.4	...	
3 (2,0)	3.9	4.0	3.7	3.9	4.2	...	
:	:	:	:	:	:		
n (x,y)							

FIG. 9

91

PART ID	FLUID NAME	TEMPERATURE	PRESSURE	DISSOLVED OXYGEN CONCENTRATION	AVERAGE FLOW VELOCITY
PIPE-001	STEAM	170°C	55Pa	10ppb	43 m/s
PIPE-002	LIGHT WATER	66°C	6Pa	3ppb	15 m/s
PIPE-003	LIGHT WATER	30°C	1Pa	1ppb	7 m/s
:	:	:	:	:	:
:	:	:	:	:	:

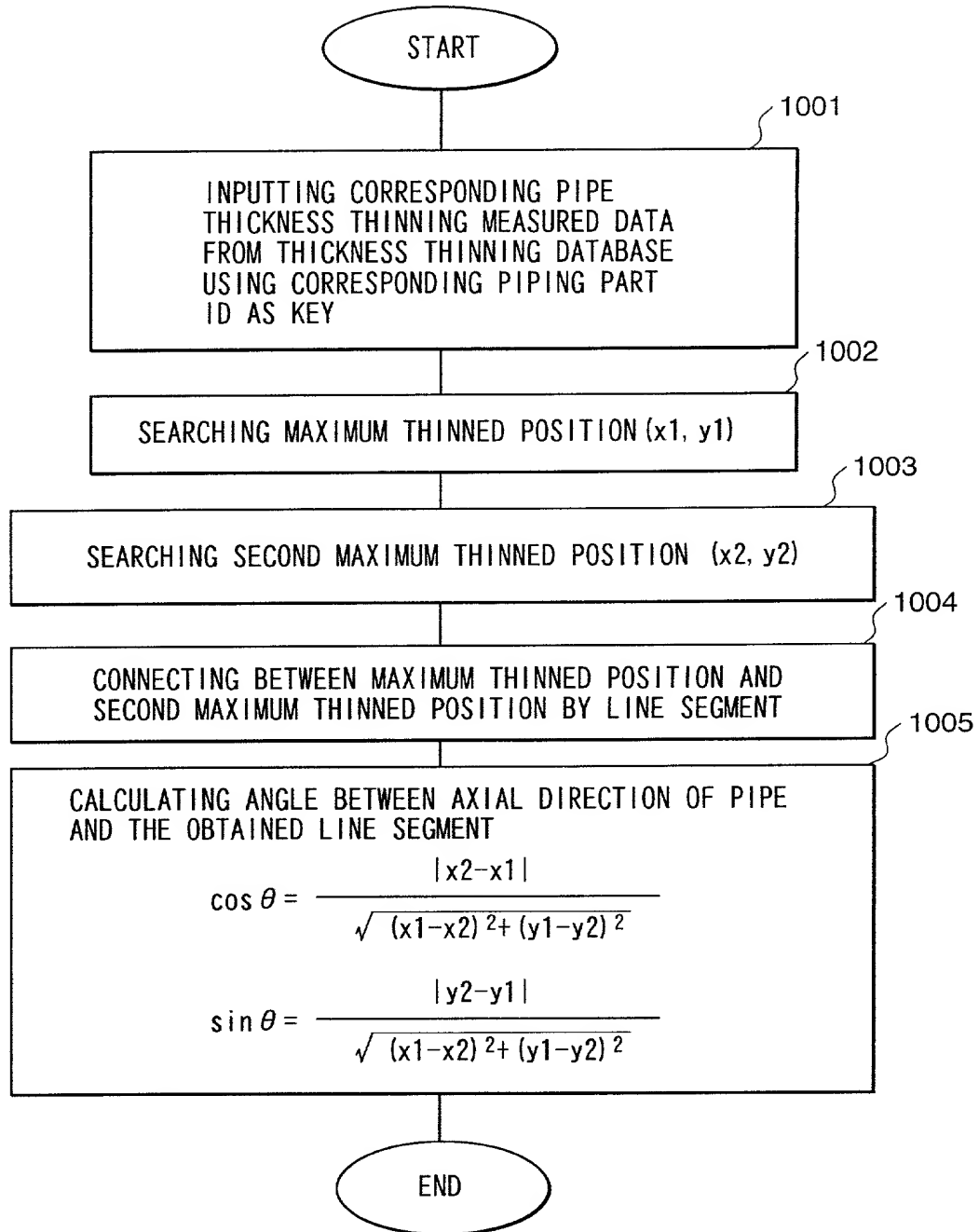
FIG. 10

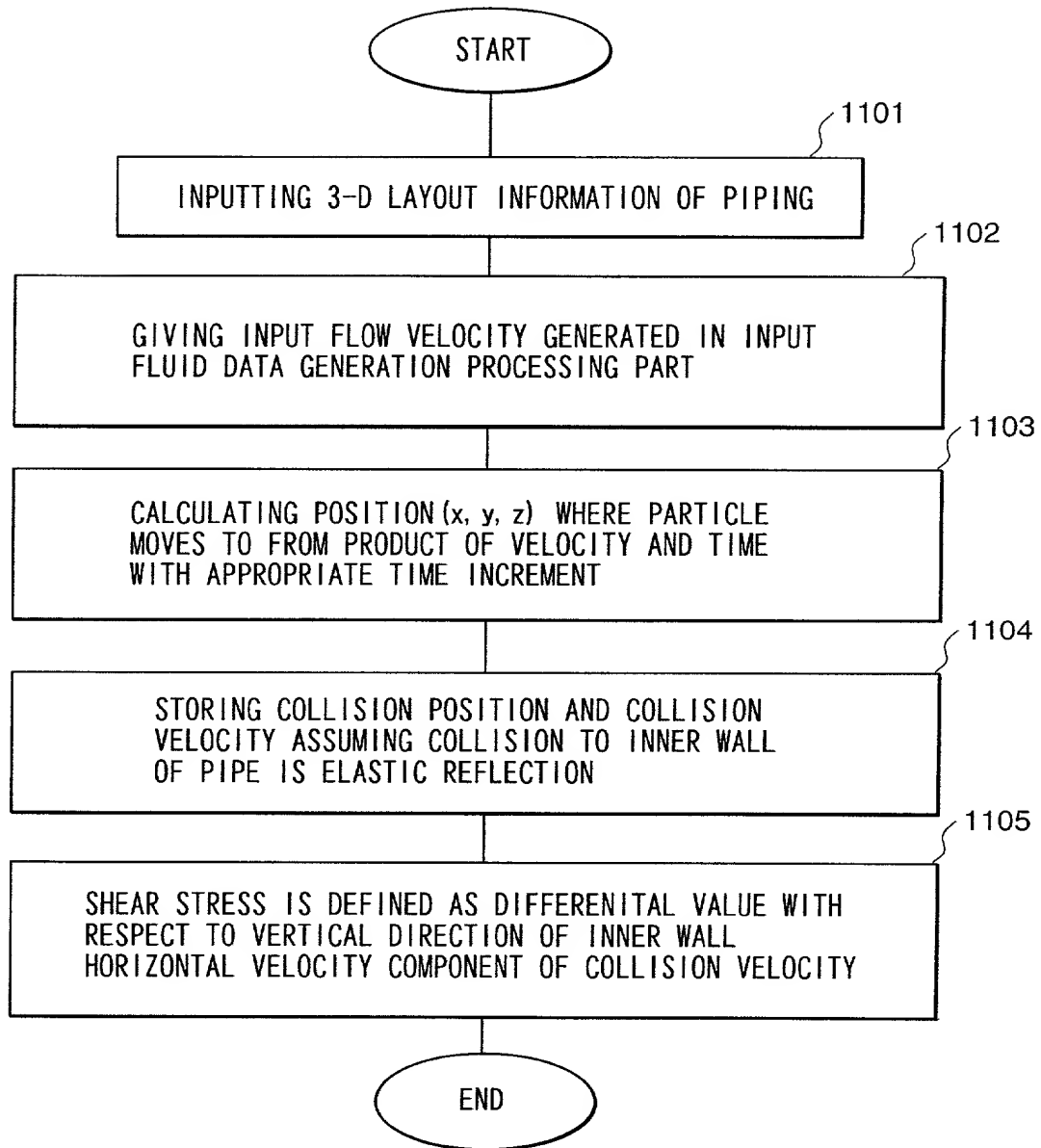
FIG. 11

FIG. 12

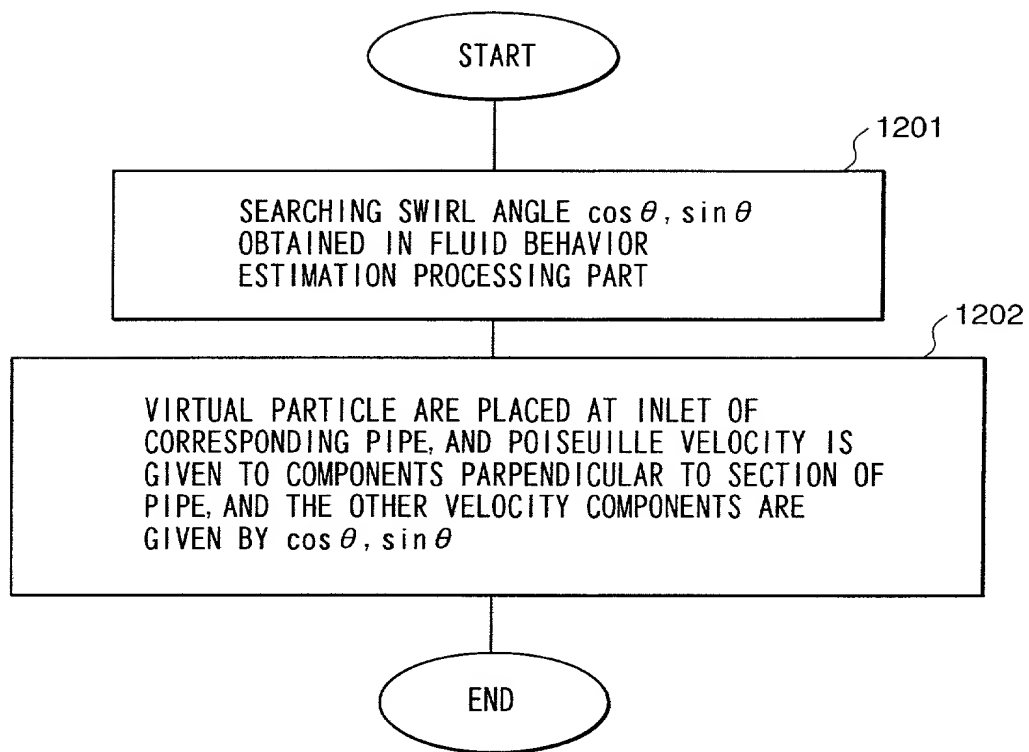


FIG. 13

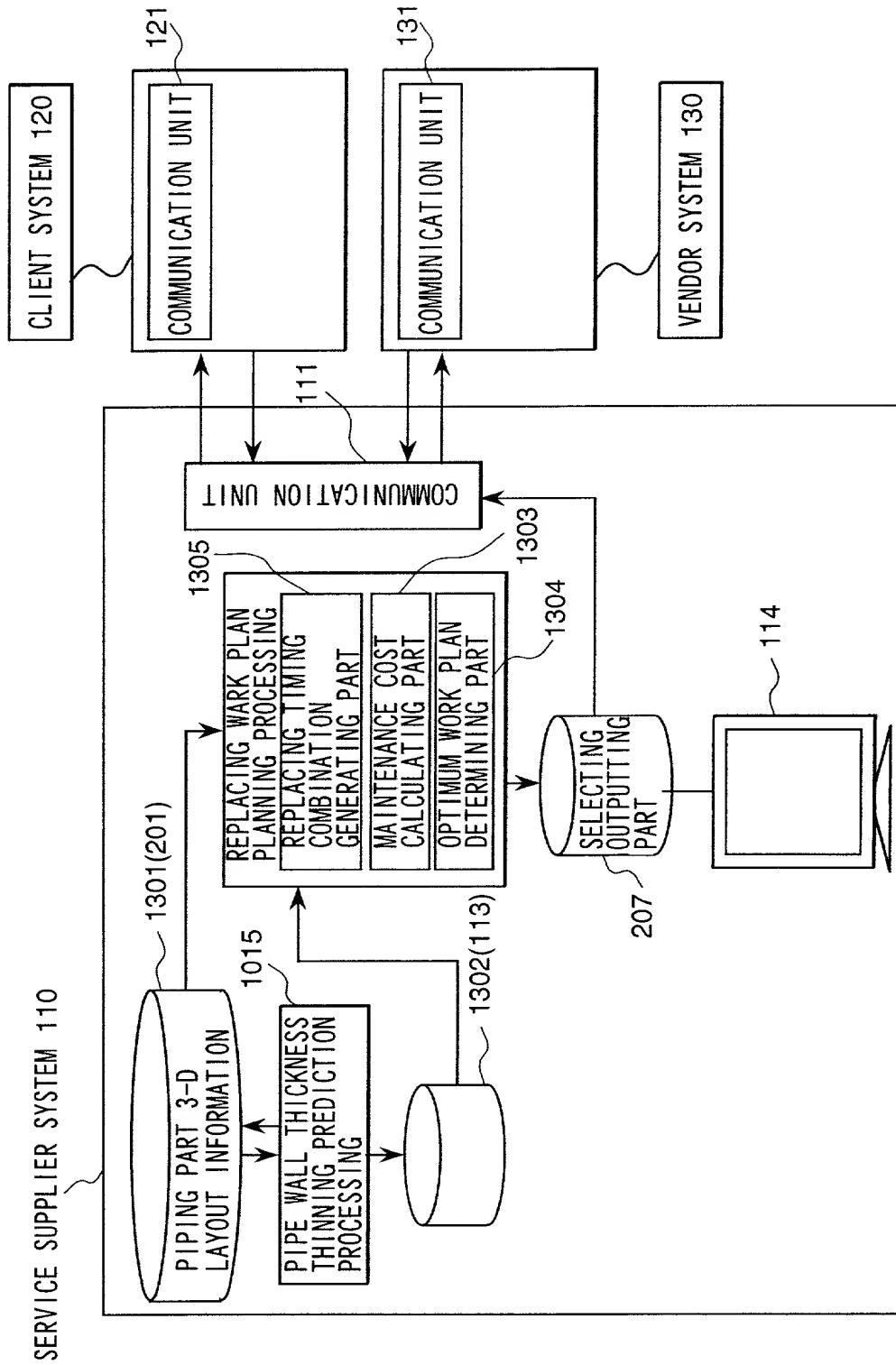


FIG. 14

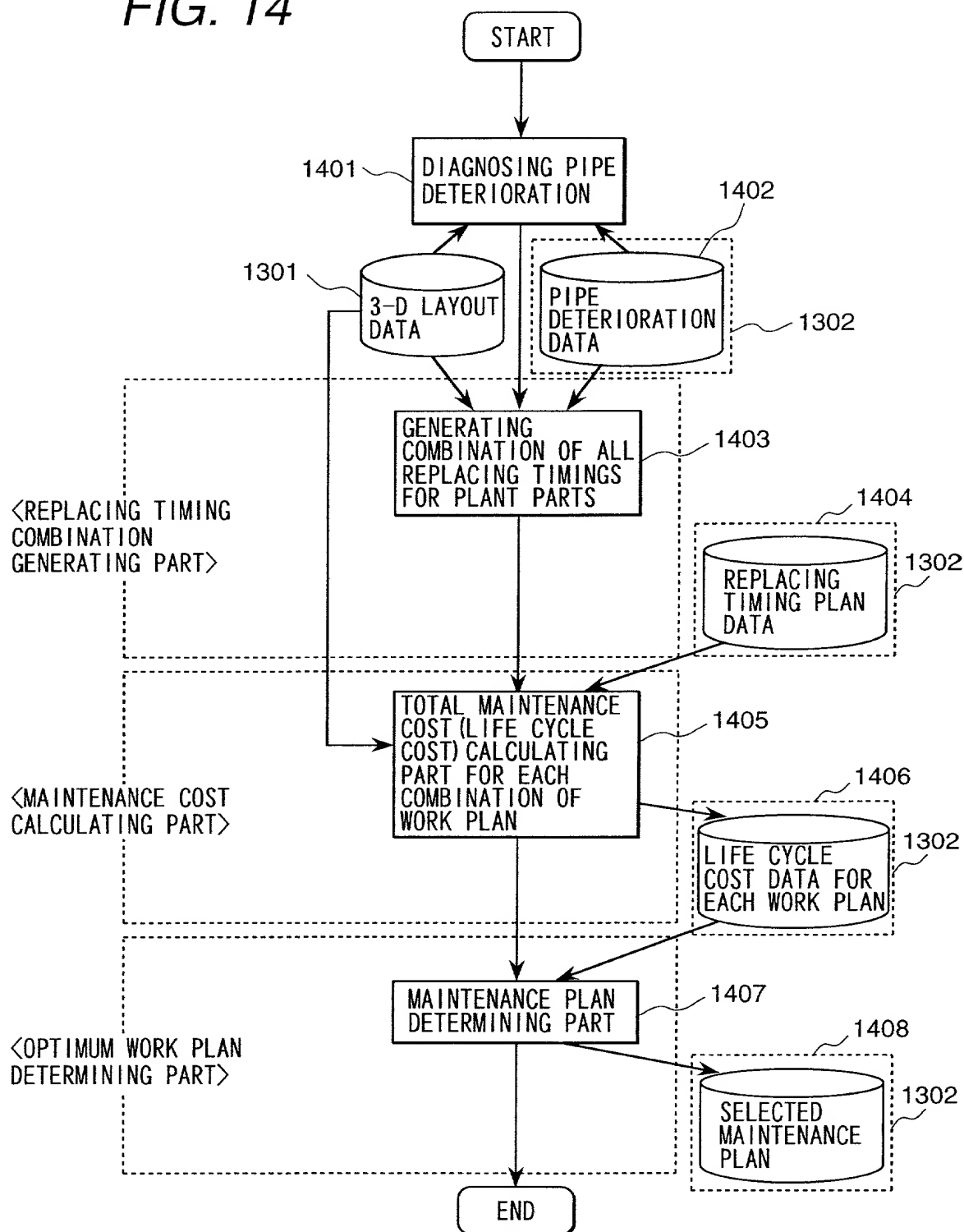


FIG. 15

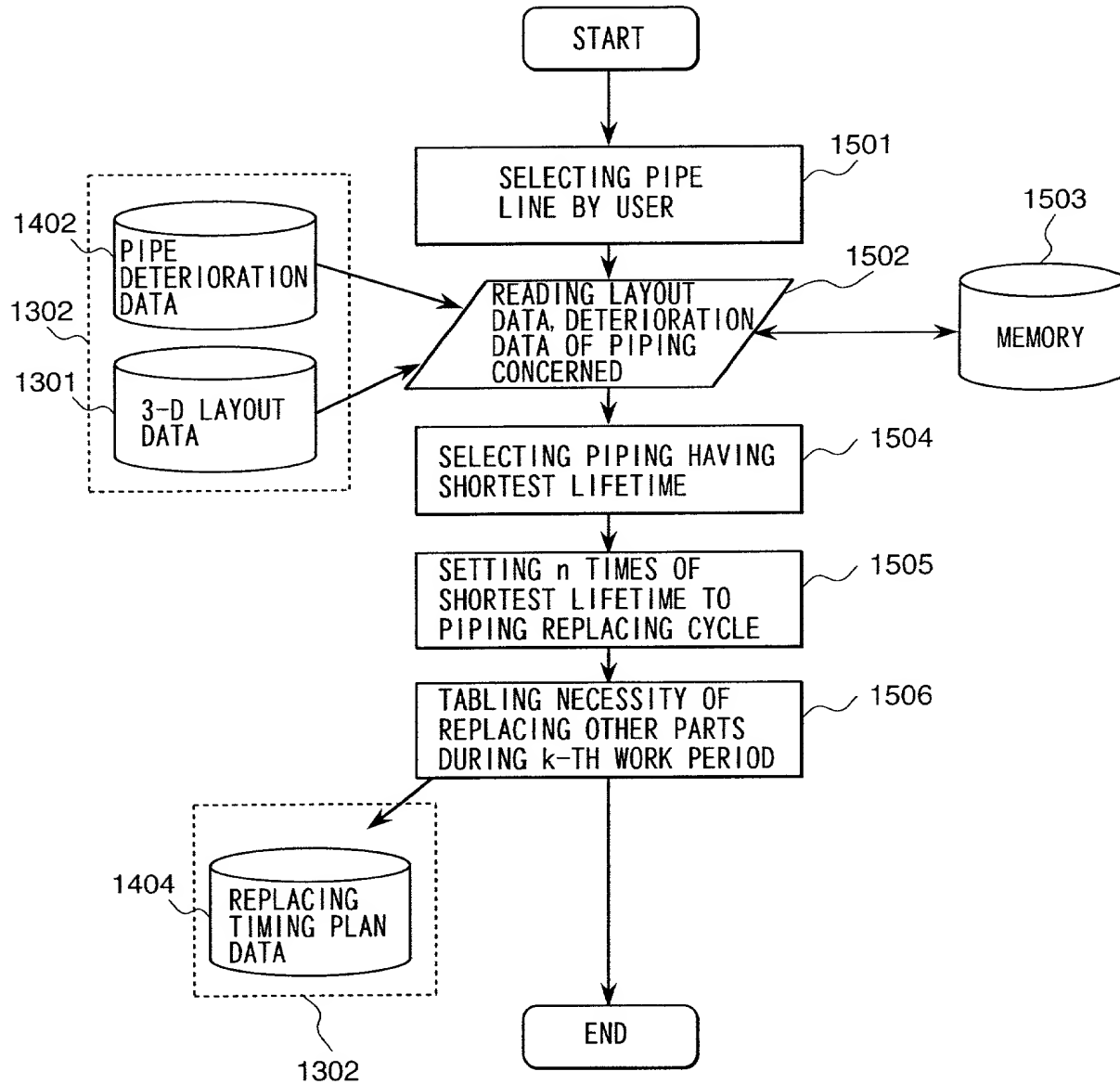


FIG. 16

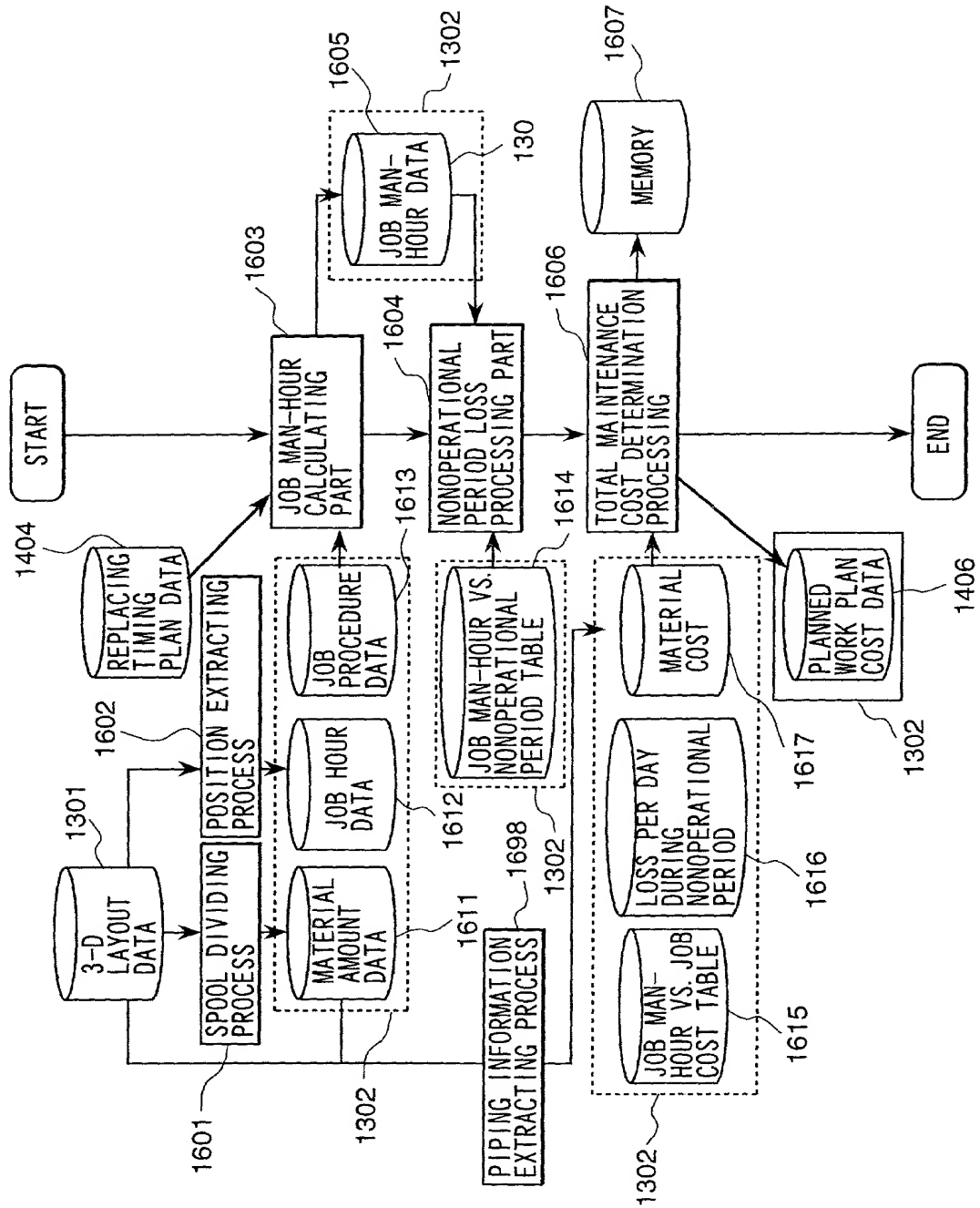


FIG. 17

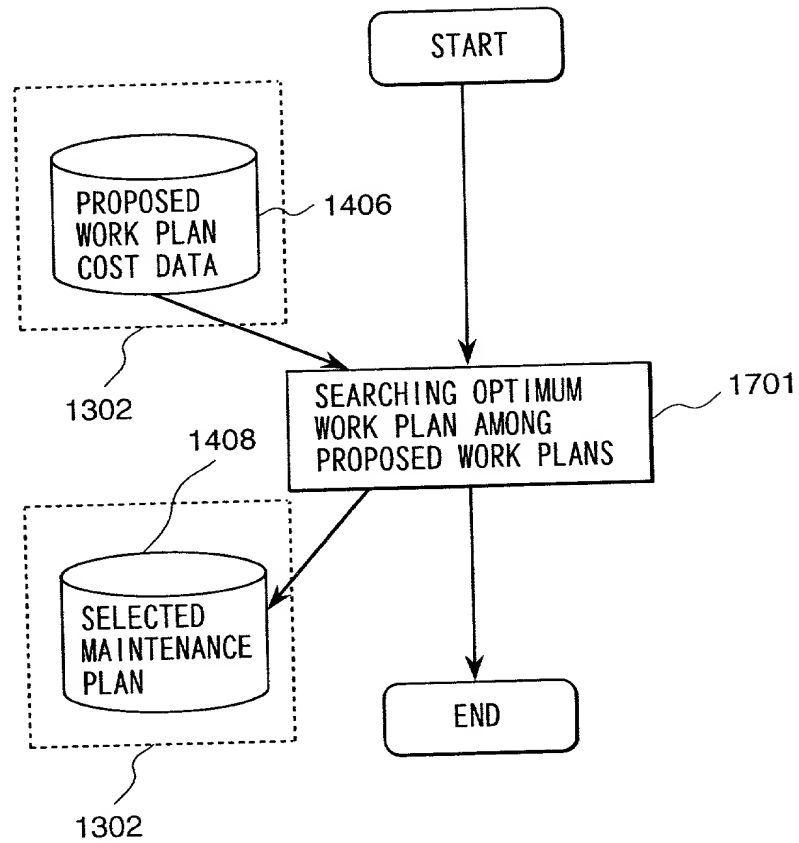


FIG. 18

1801

PART ID	KIND OF PART	SHAPE	MATERIAL	...	SYSTEM No.	PIPE-LINE No.	MEASURED WALL-THICKNESS DATA
PIPE-001	PIPE	CYLINDER(10×60)	SCPG				3
PIPE-002	PIPE	CYLINDER(10×60)	STPT				9
:	:	:	:				:
:	:	:	:				:
VAL-001	VALVE	CYLINDER(10×60)	SCPH				4

1802

1803

KIND OF PART	POSITIONAL INFORMATION
EQUIPEMENT	CENTER COORDINATE (X, Y, Z)
EQUIPEMENT	END POINT (X ₂ , Y ₂ , Z ₂) -
:	STARTING POINT (X ₁ , Y ₁ , Z ₁)
:	:
:	:

KIND OF PART	CONNECTION INFORMATION
EQUIPEMENT	(CONNECTION PART ID), ...
PIPE	(CONNECTION PART ID ₁), ...
:	(CONNECTION PART ID ₂), ...
:	:
:	:

FIG. 19

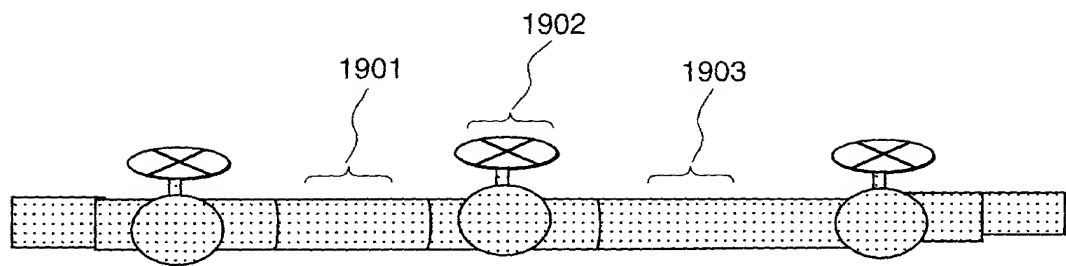


FIG. 21

PIPE ID	LENGTH	REPLACED OBJECT
PIPE-1	1200	1
PIPE-2	2000	1
⋮	⋮	⋮
VAL-1	500	1
VAL-2	550	0
⋮	⋮	⋮

FIG. 20

2001

COMBINATION No.	PIPE ID	0	3	6	9	2002	2003
	VAL-1	1	1	1	1		
1	PIPE-2	1	1	1	1		
	VAL-1	1	1	1	0		
2	PIPE-2	1	1	1	1		
	VAL-1	1	1	1	1		
3	PIPE-2	1	1	1	0		
	VAL-1	1	1	1	0		
4	PIPE-2	1	1	1	0		
	VAL-1	1	1	1	1		
5	PIPE-2	1	1	0	1		
	VAL-1	1	1	1	0		
6	PIPE-2	1	1	0	1		
	VAL-1	1	1	1	1		
7	PIPE-2	1	1	0	0		
	VAL-1	1	1	1	0		
8	PIPE-2	1	1	0	0		
	VAL-1	1	1	1	1		
9	PIPE-2	1	0	1	1		
	VAL-1	1	1	1	0		
10	PIPE-2	1	0	1	1		
	VAL-1	1	1	1	1		
11	PIPE-2	1	0	1	0		
	VAL-1	1	1	1	0		
12	PIPE-2	1	0	1	0		
	VAL-1	1	1	1	1		
13	PIPE-2	1	0	0	1		

FIG. 22

	SCAFFOLD	.....	DECONTAMINATION	.....	CUTTING	.....	DISPOSITION	.....
.....	SETTING -UP	.....	REMOVING INSULATOR INJECTING DECONTAMINANT	.....	FIXING CUTTING PIPE PIPE	.....	CARRYING -OUT	.....
JOB HOURS	15	.....	8	13	11	10	3	.....

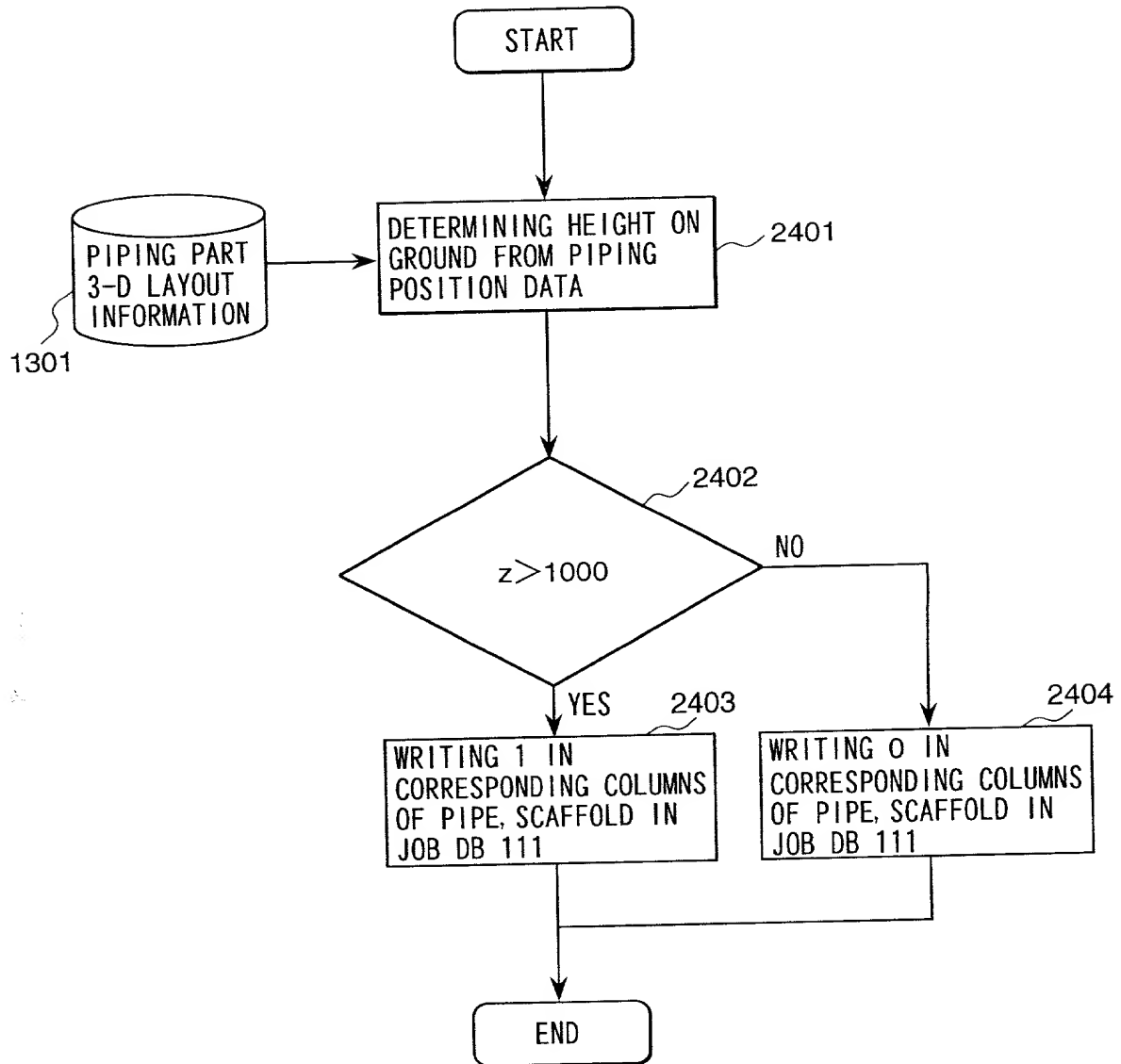
.....	INSTALLING	.....	WELDING	.....	PAINTING	.....
.....	PLACING PIPE	.....	BUTTING	.....	CLEANING	.....
	12	.....	13	.....	2	.....

FIG. 23

	SCAFFOLD		DECONTAMINATION		CUTTING		DISPOSITION	
	SETTING -UP	.....	REMOVING INSULATOR	INJECTING DECONTAMINANT	.....	FIXING/CUTTING PIPE	CARRYING -OUT	.....
PIPE-1	1	.....	1	1	.....	1	1	.....
PIPE-2	1	.....	1	1	.....	1	1	.....
VAL-1	1	.....	0	1	.....	1	1	.....
VAL-2	0	.....	0	0	.....	1	1	.....

.....	INSTALLING		WELDING		PAINTING	
	PLACING PIPE	.....	BUTTING	.....	CLEANING	.....
	1	.....	1	.....	1	.....
	1	.....	1	.....	1	.....
	1	.....	1	.....	1	.....
	1	.....	1	.....	1	.....

FIG. 24



**JOB MAN-
HOURS**

[illegible]

[illegible]

FIG. 27

2703

(UNIT:10 THOUSANDS YEN)

A	B	0	1	2	3	4	5	6	7	8	9		
	0	0	25	50	75	100	125	150	175	200	225		
1	250	275	300	325	350	375	400	425	450	475	500		
2	500	525	550	575	600	625	650	675	700	725	750		
3	750	775	800	825	850	875	900	925	950	975	1000		
4	1000	1025	1050	1075	1100	1125	1150	1175	1200	1225	1250		
5	1250	1275	1300	1325	1350	1375	1400	1425	1450	1475	1500		
6	1500	1525	1550	1575	1600	1625	1650	1675	1700	1725	1750		
7	1750	1775	1800	1825	1850	1875	1900	1925	1950	1975	2000		
8	2000	2025	2050	2075	2100	2125	2150	2175	2200	2225	2250		
9	2250	2275	2300	2325	2350	2375	2400	2425	2450	2475	2500		
...		
...		

2701

FIG. 28

2801

PART ID	KIND OF PART	SHAPE	MATERIAL	...	WALL THICKNESS	LENGTH	UNIT PRICE
PIPE-001	PIPE	CYLINDER (10×60)	SCPG				100
PIPE-002	PIPE	CYLINDER (10×60)	STPT				150
...
VAL-001	VALVE	CYLINDER (10×60)	SCPH				300

FIG. 29

	SCAFFOLD		DECONTAMINATION		CUTTING		DISPOSITION	
	SETTING -IIP	.....	REMOVING INSULATOR	INJECTING DECONTAMINANT	.....	FIXING CUTTING PIPE	CARRYING -OUT	.....
PIPE-1	6	.....	5	24	.....	5	15	.....
PIPE-2	6	.....	8	0	.....	5	0	.....
VAL-1	6	.....	0	0	.....	12	0	.....
TOTAL	18	.....	13	24	.....	22	15	.....

2901

28 / 34

.....	INSTALLING		WELDING		PAINTING		TOTAL MAN-HOUR
	PLACING PIPE	.....	BUTTING	.....	CLEANING	.....
	10	.....	15	.....	5	.....	.....
	10	.....	15	.....	5	.....	.....
	
	
	12	.....	15	.....	5	.....	.....
TOTAL	32	.....	45	.....	16	.....	.....

2901

2902

2904

2903

TOTAL JOB MAN-HOUR BY COMBINING PIPES	
--	--

TOTAL OMISSIBLE MAN-HOURS	35
------------------------------	----

FIG. 30

WARK PLAN No.	LOSS OF POWER
1	24000
2	21000
3	21000
4	18000
5	19000
6	18000
:	:
:	:

FIG. 31

PIPE ID	TOTAL MATERIAL COST
1	800
2	1200
3	2400
:	:
:	:
:	:
	4400

FIG. 32

COMBINATION No.	PIPE ID	0	3	6	9	Cost (10 THOUSANDS YEN)
1	PIPE-2	1	1	1	1	35,800
	VAL-1	1	1	1	1	
2	PIPE-2	1	1	1	0	34,510
	VAL-1	1	1	1	1	
3	PIPE-2	1	1	1	1	34,360
	VAL-1	1	1	1	0	
4	PIPE-2	1	1	1	1	31,830
	VAL-1	1	1	1	1	
5	PIPE-2	1	1	1	1	34,360
	VAL-1	1	1	0	1	
6	PIPE-2	1	1	1	0	33,070
	VAL-1	1	1	0	1	
7	PIPE-2	1	1	1	1	32,920
	VAL-1	1	1	0	0	
8	PIPE-2	1	1	1	0	31,630
	VAL-1	1	1	0	0	
9	PIPE-2	1	1	1	1	34,360
	VAL-1	1	0	1	1	
10	PIPE-2	1	1	1	0	33,070
	VAL-1	1	0	1	1	
11	PIPE-2	1	1	1	1	32,920
	VAL-1	1	0	1	0	
12	PIPE-2	1	1	1	0	31,630
	VAL-1	1	0	1	0	
13	PIPE-2	1	1	1	1	32,920
	VAL-1	1	0	0	1	

3202

FIG. 33

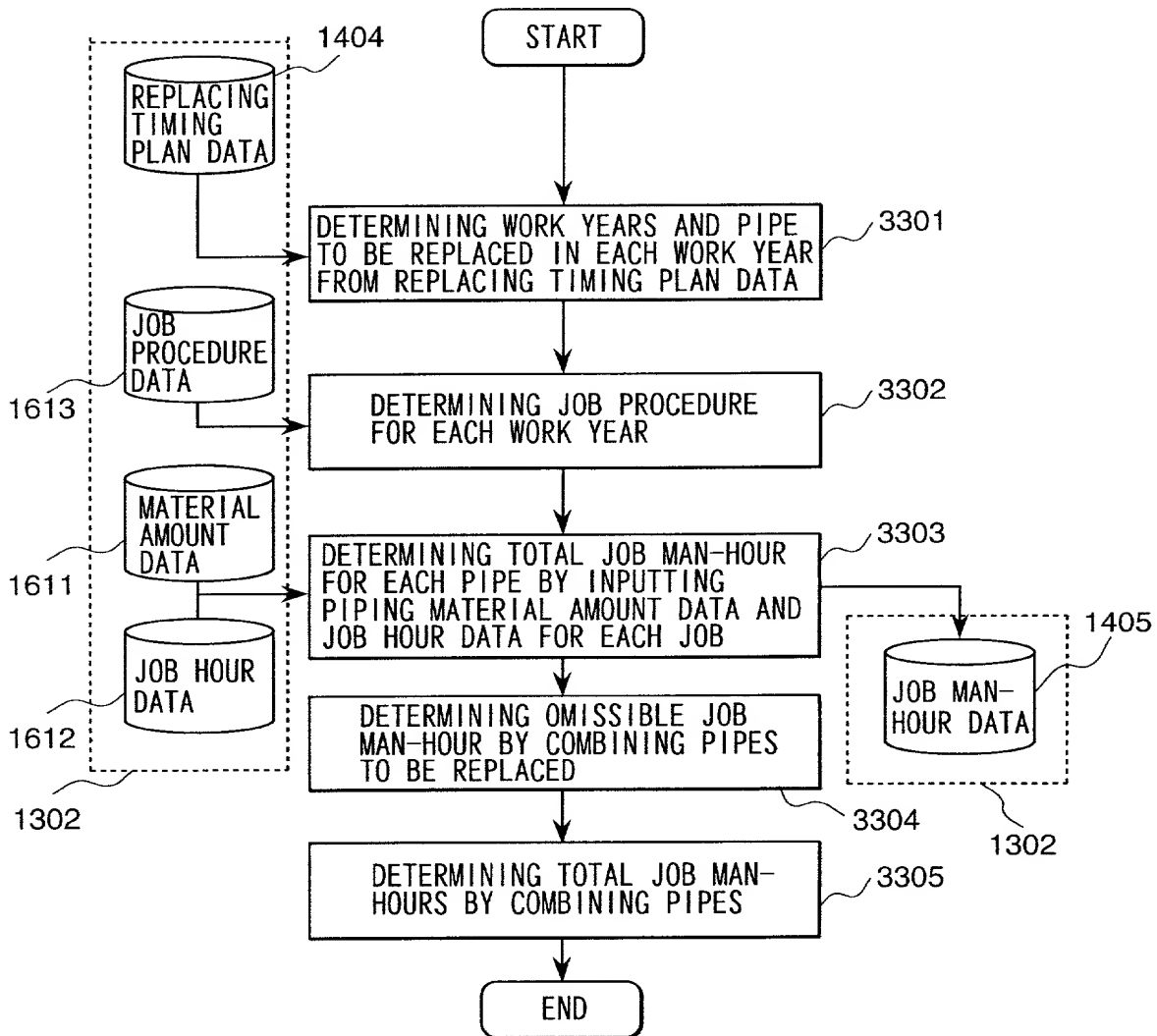


FIG. 34

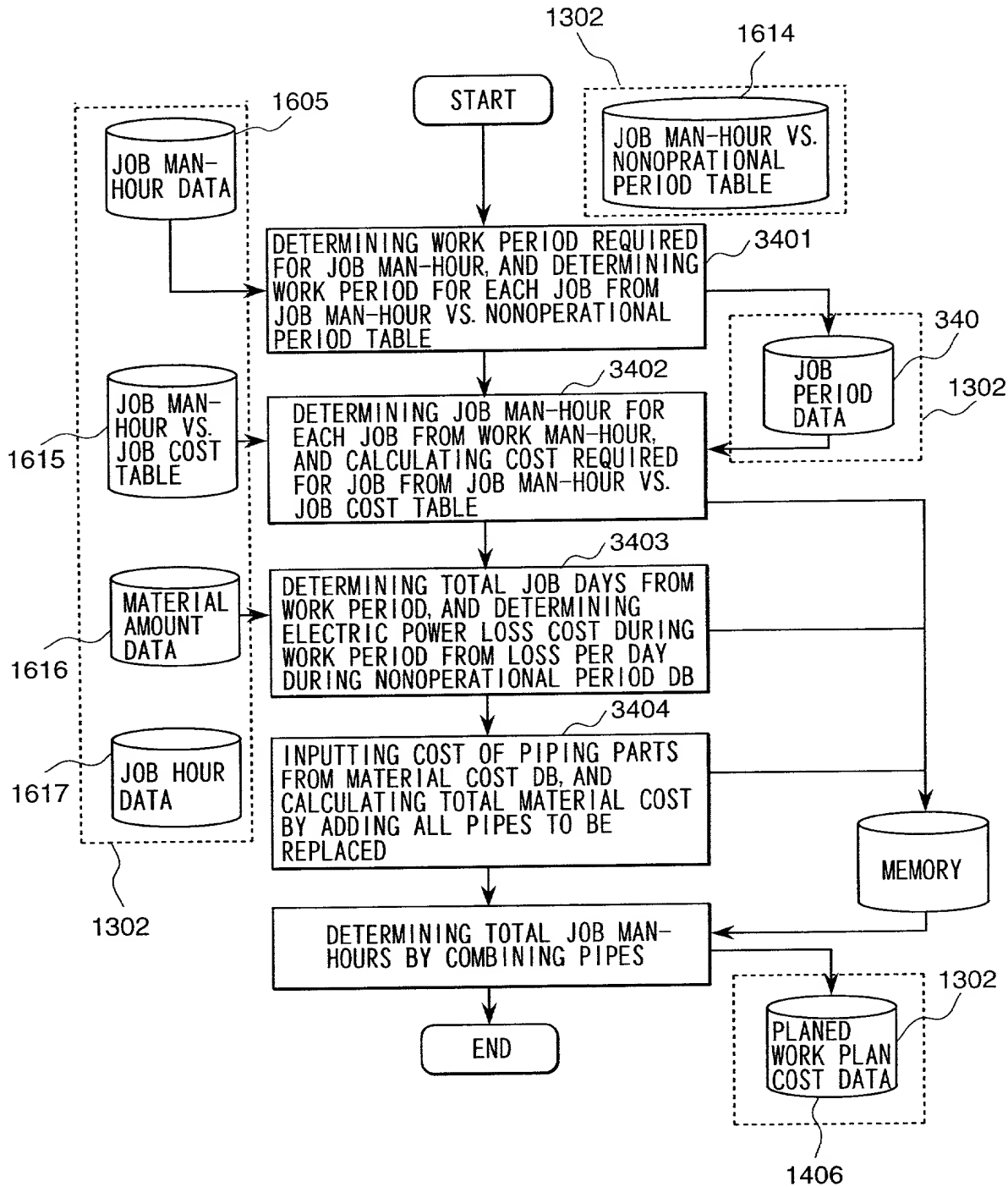


FIG. 35

3501

	SCAFFOLD	.....	DECONTAMINATION	.....	CUTTING	.....	DISPOSITION	.....
	SETTING -UP	.....	REMOVING INSULATOR DECONTAMINANT	.....	FIXING CUTTING PIPE PIPE	.....	CARRYING -OUT	.....
JOB HOURS	5	.....	5	0	5	5	7	.....

3502

.....	INSTALLING	.....	WELDING	.....	PAINTING	.....	TOTAL MAN-HOUR
	PLACING PIPE	.....	BUTTING	.....	CLEANING	.....
	5	.....	12	.....	5	.....	0

NUMBER OF OMISSIBLE SECTIONS S
0

FIG. 36

